BCD
Emissions Elimination Rod Rings

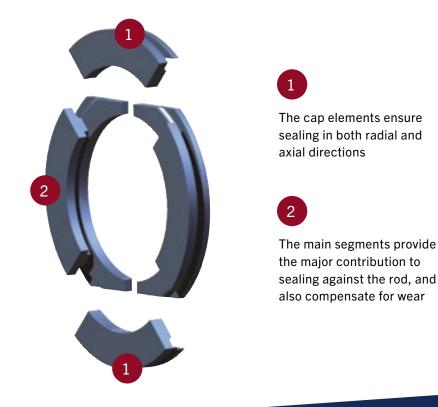Reduce gas leakages and increase lifetime

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More efficiency, less fugitive emissions

Piston rod packing is the primary source of emissions generated from reciprocating compressors. The rings inside the packing seal the gas around the moving piston rod, preventing it from escaping the cylinder. Conventional packing rings work in pairs, each ring covering the gaps in the adjacent ring. However, this still leaves microscopic escape paths between the rings, where the gas can leak.

Our Emissions Elimination Packing Ring (BCD) seals the piston rod to prevent gas leaks during the compressor operation. With up tp 70% leakage reduction, fugitive emissions can be reduced drastically. Combining two rings into one eliminates the disadvantages and reliability issues associated with conventional two-ring designs. The main segments seal the piston rod and form a gap to compensate for wear. BCD extends your maintenance intervals and eliminates downtime due to premature wear. Therefore, the design saves both: material and safeguard the environment.

1

The cap elements ensure sealing in both radial and axial directions

2

The main segments provide the major contribution to sealing against the rod, and also compensate for wear

> By replacing conventional rings with BCD, we were able to extend the maintenance intervals, and above all greatly reduce fugitive emissions which will bring us one step closer to our goal of protecting the environment.

Refinery, UK

Functional principle and design advantages

The Emissions Elimination Packing Ring uses a pressure equalization groove to reduce contact pressure. The main segments seal the piston rod and form a gap to compensate for wear. The cap segments seals in axial and radial directions which ensures pressure equalization and guarantees high efficiency over the entire service life. The narrow design reduces friction which leads to lower heat generation and wear. In addition, the rings are compact, allowing the packing length to be shorter than that of conventional pressure packings.

Technical data

Piston rod diameter:	20 mm (0.78 inches) to 140 mm (5.51 inches)
Pressure range:	3-250 bar

Fields of application (extract):	
Process gas:	Refining, petrochemical industry, chemical industry
Oil and gas:	Gas lift and re-injection, gas storage, LNG terminal, gas gathering, gas transportation, CNG
Industrial gases:	Syngas (hydrogen, carbon oxide), air separation (oxygen, nitrogen), specific gases (argon, helium,…)
Food industry:	PET bottle blowing, industrial air
Power generation:	Cogeneration, combined heat and power plant, biogas

Benefits at a glance

Significantly reduced gas leakages protect the environment

Up to 70% leakage reduction helps operators meet stringent emission standards and reduce gas losses

Low frictional resistance: Saves energy and may eliminate the need for water cooling

Reduced wear: Increases reliability and service life

Easier ring replacement simplifies maintenance

Learn more by visiting
www.hoerbiger.com/bcd
today!

Contact us via email
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For renowned customers from the energy sector, the process industry, the automotive industry, the mechanical engineering industry, safety technology, and the electronics industry, performance-determining products and services from HOERBIGER make the difference. With innovations for decarbonization and energy transition, HOERBIGER is already enabling change today for a better tomorrow. As majority shareholder, the HOERBIGER Foundation preserves the 129-year-old entrepreneurial heritage and guarantees stability, independence, and a future-oriented strategy.

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